

Crohn's disease presenting as acute abdomen: Report of two cases

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Abstract

Context: Crohn's Disease may involve any part of GI tract leading to inflammation of all the layers of the affected bowel. The symptoms may mimic other intestinal pathologies and at times diagnosis remains a dilemma. Mostly medical therapy remains the mainstay of treatment. However surgical intervention is warranted in cases presenting with acute abdomen.

Case Report: We present two such cases of acute abdomen admitted in our hospital and diagnosed as case of intestinal obstruction. Exploratory laparotomy was performed in both cases and diseased resected segments were confirmed as Crohn's Disease on histopathology. **Conclusion:** Crohn's Disease should be kept as a differential diagnosis in patients presenting with acute abdomen especially with a long history of vague abdominal complaints.

Keywords: Crohn's disease, obstruction, stricture, gangrenous bowel.

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Introduction

Crohn's Disease (CD) is an inflammatory disorder and may affect any part of GI tract. Though it is uncommon in India yet we come across this entity sparingly. The signs and symptoms of CD overlap with many other abdominal disorders like tuberculosis, ulcerative colitis, irritable bowel syndrome etc. It may even involve systems other than GIT[1].

Although it is difficult to make an accurate diagnosis of this disease, many diagnostic armamentaria are available to suggest its presence. Most of the patients are treated conservatively yet a few may require surgical intervention especially presenting with complications like intestinal obstruction, perforations, abscess and fistula formations [2].

We have encountered two such cases of intestinal obstruction requiring surgical intervention which were confirmed to be CD histopathologically. Rarity and clinical curiosity of this entity suggest reporting of these cases.

Case Report

Case One

A 55-year male was admitted in our hospital with a history of abdominal pain, distension, absolute constipation and vomiting for the last 6-8 days. He had past history of weakness, anorexia, low grade fever, and episodes of pain in the right lower abdominal quadrant and had taken anti tubercular treatment for a period of 6 months after suspicion of abdominal tuberculosis outside our hospital. Abdominal examination revealed the features of acute intestinal obstruction with dilated bowel loops and visible peristalsis.

The previous investigations of the patient namely colonoscopy, CT scan and barium meal studies were reviewed and were not suggestive of Crohn's disease. Even colonic biopsies did not pointed towards CD. Contrast Enhanced Compute Tomography was only suggestive of dilated large bowel loops (Figure 1). However, in view of acute intestinal obstruction, exploratory laparotomy was performed after routine investigations and abdominal plain X-rays and

intraoperatively multiple strictures were found at terminal ileum, caecum, ascending colon and a completely obstructing stricture at hepatic flexure of the colon. Right hemicolectomy was performed followed by ileostomy and distal mucus fistula.

Histopathological examination of the resected specimen showed prominent and enlarged lymphatic follicles, proliferation of muscularis mucosa and formation of fissures extending from mucosa to serosa along with gross edema. Marked infiltrates of inflammatory cells involving all the layers and surrounding the fissures were present. Diagnosis of Crohn's disease was made. Postoperative period was uneventful.

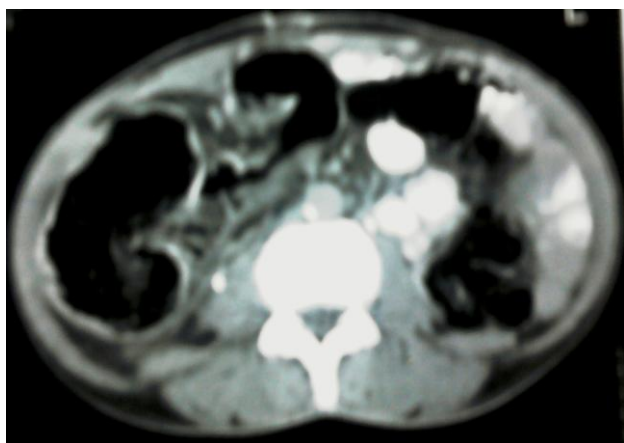


Fig. 1 CT scan showing right sided dilated large bowel loops in case no. 1 of intestinal obstruction

Case Two

A 65-year male chronic smoker was admitted to the medicine ward in our hospital as a case of acute exacerbation of chronic obstructive pulmonary disease with history of diarrhea and abdominal pain for the last 14 days. However patient developed features of acute intestinal obstruction in the form of severe abdominal pain, gross abdominal distention, absolute constipation while on medical treatment for 4-5 days. In view of patients acute abdominal condition exploratory laparotomy was performed. Intraoperatively the entire small bowel was grossly dilated with dense interloop adhesions in the terminal ileum with multiple gangrenous patches. About 500-600 ml pus present in between the adhered loops of bowel was suggestive of an old terminal ileal perforation (Figures 2 and 3) The gangrenous bowel was resected out and an ileostomy with a distal mucus fistula was made.

Histopathological examination showed narrowed areas of ileum with thickening and congestion of all the layers along with focal non caseating granulomas in the serosal layer. Chronic inflammatory infiltrates were present in all the layers with acute inflammatory cells in the serosal layer. Thus, a diagnosis of Crohn's disease leading to chronic intestinal obstruction with superadded bacterial infection of serosal layer was made.

Postoperatively, the patient was put on broad spectrum

antibiotics and chest care was taken. The patient was doing well for a period of more than one month after surgery but unfortunately he had collapse of right lung with pleural effusion and died of respiratory cause.



Fig. 2 Intraoperative picture showing multiple gangrenous patches in terminal ileum in Case Two.



Fig. 3 A segment of ileum with dense interloop adhesions and bowel necrosis in Case Two

Discussion

Crohn's disease (CD) causes inflammation of the digestive tract. It can affect any area of the GI tract, from mouth to anus, however it most commonly affects the ileum [3]. In CD, all layers of the intestine may be involved, and normal healthy bowel can be found between sections of diseased bowel. It affects men and women equally in all age groups with predilection in second and third decades with familial preponderance in a few [4].

CD usually presents with abdominal pain especially due to involvement of ileum, blood stained diarrhoea and anaemia. Some may have low-grade fever, nausea, and vomiting. Fissures or cracks may be evident, and fistulas and abscesses may form in anal involvement [5]. It may also present with extraintestinal manifestations like skin or mouth lesions, pain in the joints, eye irritation, kidney stones, gallstones, and other diseases of the hepatobiliary system [6]. Affected children may have delayed milestones.

Severe cases of CD may have most common complication like intestinal blockage with thickening and fibrosis of the affected segment [7].

In spite of the vast diagnostic modalities like ultrasound, barium x-rays, CT scan and colonoscopy, a clear diagnosis of CD remains obscure and no single “gold standard” indicator of this disease has been established [8].

Most patients of CD are usually managed by conservative treatments which include adequate rest, nutritious diet, multivitamins, iron, folic acid, antioxidants, sulfasalazine. Though surgery is required to relieve obstruction, to repair a perforation, to treat an abscess, or to close a fistula yet a judicious approach to the patient is of utmost importance when to intervene or to continue with conservative management to avoid life threatening complications [2].

The outcome of CD has improved with good medical care. It is serious, but not a terminal illness. Mortality in these patients are due to risks of surgery or associated diseases [9]. These patients require annual follow-up even if they are well and any new symptom should be given due consideration.

Conclusion

Although symptoms of CD mimic many other abdominal conditions but it should be kept in back of mind as one of the causes of acute abdomen especially in those patients who have a long history of intestinal pathology.

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